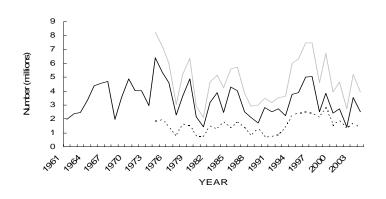
about 65,000 during the early 1990s to over 146,000 during 1999. Over 90% of this harvest occurred in the states of Louisiana and Arkansas. In Missouri, the harvest of white-fronted geese is low and unpredictable. The average harvest has dropped from 2,800 white-fronted geese during 1999-2000 to 1,013 during 2001-2003. The primary harvest appears to occur during late season in the Missouri Bootheel.

## 2004 DUCK AND HABITAT STATUS

Each year, extensive surveys of waterfowl and wetlands are conducted in May and July in primary breeding areas of the U.S. and Canada. Coverage of 1.3 million mi<sup>2</sup> in the spring provides information about breeding populations and the condition of wetlands in the Prairies, northern Canada, and Alaska. July surveys in much of the same area are the source for information about the numbers of ducks produced and the condition of habitat for duck broods.

Numbers of wetlands, termed "May ponds" and "July ponds," reflect habitat conditions for duck pairs in the spring and duck broods in the summer, respectively. Projections of the mallard fall flight are based on historic relationships among breeding duck numbers, habitat conditions, adult survival, and expected fall age ratios and duck numbers. This year, the

Figure 7. Number of May ponds in the U.S. and Canadian Prairies



July survey was not conducted due to budget shortfalls, therefore information about habitat conditions and brood counts during July are limited.

Table 4. Percent change in habitat and population indices from 2003 (03) and the long-term average (LT) among breeding ground regions.

	May Ponds		Breeding Ducks		<u>Mallards</u>	
Region	vs 03	vs LT	vs 03	vs LT	vs 03	vs LT
E. Dakotas	-32%	-20%	+3%	+29%	+4%	+77%
W.Dakotas/MT	+25%	+15%	-7%	0%	-2%	-1%
S. Alberta	-7%	-30%	-7%	-42%	-4%	-46%
S. Saskatchewan	-32%	-26%	-38%	-22%	-24%	-23%
S. Manitoba	+10%	-20%	-7%	-5%	-22%	+5%

## **Duck Habitat:**

Reports of above average snowfall during winter 2003-2004 in portions of southern Canada raised expectations for improved wetland habitat conditions. However, dry soil conditions combined with warm, windy weather during April resulted in a poor frost seal and little runoff. As a

result, the number of May ponds in Prairie Canada and the northcentral U.S. declined (-24%) from 5.2 million during 2003 to 3.9 million during spring 2004 and was 19% below the long-term average. Compared with 2003, there were fewer ponds in Canada (-29%) and the U.S. (-16%) in spite of heavy snowfall in portions of the southern prairies on May 12-13.

Precipitation since May improved wetland conditions in portions of central and eastern Prairie Canada, but much of the western prairies remain dry. The precipitation came too late for initial nesters, but should help re-nesters and should improve brood survival. Overall, production from southern Saskatchewan and Alberta is expected to be only fair to poor. The July brood production survey was not conducted this year due to USFWS budget constraints, but limited flights during July over certain areas confirmed reports of improved wetland conditions due to rain that came after the May survey. Although recent rains may improve habitat status going into fall, several years of wet growing seasons are needed for vegetation to reach optimal conditions for breeding waterfowl.

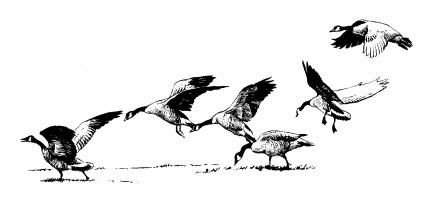
## **Duck Populations:**

Total duck numbers in the traditional survey area decreased 11% from 36.2 million in 2003 to 32.2 million in 2004, and were 3% below the long-term average. Duck numbers were generally down in southern Canada (S. Alberta -7%, S. Sask.-38%, S. Manitoba -7%) but increased by 15% in northern Saskatchewan, northern Manitoba, and western Ontario. Increases in northern areas are often noted when the southern prairies are dry. Blue-winged teal numbers (4.1 million) declined 26% from last year and were 10% below the long-term average. Northern shovelers and American Wigeon were 22% below 2003. Gadwall (+56%), green-winged teal (+33%), and shovelers (+32%) were above their long-term averages. Northern pintails (-48%), American wigeon (-25%) and scaup (-27%) were below their long-term averages. Canvasbacks were slightly above their long-term average (+10%).

**Mallard Fall Flight:** The 2004 breeding population estimate for mid-continent mallards of 8.36 million (7.4 million in the traditional survey area plus .93 million in Michigan, Minnesota, and Wisconsin), is similar to the 8.8 million estimate of 2003. The fall flight index for mallards is projected to be 9.4 million, compared to 10.3 million in 2003.

## 2004 GOOSE STATUS

Canada geese that migrate to Missouri include birds from 4 different populations. Tallgrass Prairie Population Canada geese migrate from near the Arctic Circle on Baffin Island, the Eastern Prairie and Mississippi Valley populations originate from west Hudson Bay in northern Manitoba and



Ontario, and giant Canada geese nest in more temperate areas including Missouri. Geese from different populations survive, reproduce, and are harvested at different rates. Each population experiences different breeding conditions each year. As a result, population-specific information is needed to assess annual status and to develop appropriate regulations recommendations.